

REMARKS

Claims 1 and 3-8 are pending. No amendments have been made by way of the present submission, thus, no new matter has been added.

Additionally, no new issues have been raised which would require additional search and/or consideration on the part of the Examiner.

In the event that the present submission does not place the application into condition for allowance, entry thereof is respectfully requested as placing the application into better form for appeal.

In the previous amendment submitted on September 18, 2007, Applicants amended claim 1 to include the phrase "...wherein the weight ratio of the compound I to the compound II-2 or II-4 is from 16:1 to 1:4." This limitation was included to place the application into condition for allowance. However, in the Advisory Action dated October 22, 2007, the Examiner maintains that the present claims are not allowable. That is, in the Advisory Action, the Examiner asserts:

Specification does not contain the synergistic combinations of the ratios of compounds II-2 and II-4 as claimed. Since the compounds are known combination of these compounds to prepare a composition for the same purpose is considered obvious. Synergistic combinations of broad ranges of the compounds as claimed cannot be predicted. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069. In the absence of any criticality and/or unexpected results instant claims are not allowed. The ranges where synergism has been shown and was not expected can be allowed.

Applicants respectfully submit that the ranges where synergism has been shown and was not expected is indeed the ranges being claimed. To this end, independent claim 1 requires a fungicidal mixture, comprising A) the compound of the formula I and B) at least one compound

II selected from the group of the compounds II-2 and II-4 in a synergistically effective amount, wherein the weight ratio of the compound I to the compound II-2 or II-4 is from 16:1 to 1:4. In fact, the claimed range of weight ratio is narrower than technically necessary. Indeed, usual ratios of 100:1 to 1:10, discussed at page 5 of the present specification should be sufficient.

Applicants take this opportunity to point out that the Examiner wrongly asserts that the specification does not contain synergistic combinations of the recited ratios of compounds II-2 and II-4 as claimed.

The synergistic activity as demonstrated in the present specification has been determined using the broadly accepted Colby's formula (See present specification at page 8, lines 22 to 38). This formula (S.R. Colby, Weeds 15, 20-22 (1967)) and its interpretation is scientifically well accepted and widely used. For instance, the Colby formula has been cited more than 80 times in peer-reviewed scientific literature dated up to 2007, and widely used in innumerable granted US patents. According to Colby (1967) a higher observed efficacy as compared to the calculated efficacy "is indicative of a synergistic response" (S.R. Colby, Weeds 15, 20-22 (1967), see page 21 herein last chapter). To this end, the Examiner must acknowledge that all Use Examples provided in the present specification show that the observed efficacy was higher compared to the expected efficacy for both mixtures (I + II-2 and I + II-4) and the complete range of ratios as claimed (16:1 to 1:4) and against all tested fungal pathogens (See present specification at page 9-12, Examples 11-22, 33-41). Therefore, these results show a synergistic response over the entire range of ratios as claimed according to Colby (1967).

Furthermore, even if the difference between the observed efficacy and the calculated efficacy is small, this is still significant and indicative of a synergistic response. Indeed, whether

this difference is small or not is irrelevant since synergism (cf. Colby, 1967 as above) does not require a certain magnitude for this difference. Illustrative reference has been made to Example 36, as an example wherein the difference is small. In fact, the difference in this sample of 13 between observed efficacy and calculated efficacy is very strong since it is due to a 50% reduction of the infection by the fungal pathogen. The infection level can be calculated based on Abbot's formula (see Specification page 8, lines 10 to 16) by conversion to the following term to determine the fungal infection of the treated plants (α) based on the efficacy (E):

$$\alpha = (1-E/100) \cdot \beta$$

The fungal infection of the untreated plants (β) for Example 36 was 81% (Specification page 9, line 10, Table C, Example 23). Thus, the observed efficacy (E) of 88% in example 36 corresponds to an infection level of 10%, whereas the calculated efficacy (E) of 75% in example 36 corresponds to an expected infection level of 20%. Thus, the synergistic response led to a 50% reduction of the fungal infection level. This reduction by a factor of 2 approves the significant improvement of the activity against harmful fungi by synergistic action according to the invention (See specification at page 2, lines 37 to 41).

The above assertions are fully accurate as reflected in the Declaration pursuant to 37 CFR 1.132 attached hereto. The Examiner is thus respectfully requested to review the attached Declaration, as well as the above comments and arguments of record. Consequently, the Examiner is thus requested to allow the presently pending claims. Accordingly, issuance of a Notice of Allowability is respectfully solicited.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie (Reg. No.

42,874) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: December 20, 2007

Respectfully submitted,

By 

Craig A. McRobbie

Registration No.: 42,874

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorneys for Applicant

Attachments: Declaration under 37 C.F.R. § 1.132
S.R. Colby, Weeds 15, 20-22 (1967).